

Meeting Minutes :  
9/24/2018

**Present:**

- Emily
- Ray
- Jake
- Dr. Rezaie

**Before next meeting:**

- Ray: look into potential site visit locations
- Emily and Jake: prepare PowerPoint w/ ideas a items for next meeting

**Action items:**

New location / time → ME conference room, Tuesdays@ 4:45

**Thermal E. plants:**

E- temperatures typically btwn. 100-300°C

Lowest temp. → Organic Rankine cycle (100-180°C) working fluid (R134A, R245 fa, R123, R22)

Other types:

- single and double flash Steam Power Plants (single flash at least 150°C but higher better and triple 350°C)
- Dry Steam (greater than 200°C)

**Design Ideas:**

Fresnel lenses vs Solar Troughs

- | Fresnel Lenses                                 | Solar Trough  |
|--|---|
| • J-One focal point w/ collector moving it     | • Re- Not as much solar tracking needed                     |
| • Flat Lens (cheaper)                          | • E-curved lenses (more expensive)                          |
| • Re- Might be a hazard for animals expensive) | • E- Double axis possible? Then it could change with season |

Site visit →

- Pa-Butte is a huge disaster area and it's open to visitors
- Closest would be near McCall a- currently getting permits. will move 300 tons of material
- Barrick gold mines near las Vegas an example to look at

LayOut Of mines: A-flooding a major problem in mines → Ra-this can be used to benefit us w/ water pressure helping process  
pumping into high pressure would make it easier to pump in and keep CO2 Separate ← Sadly doesn't go deep enough to heat water